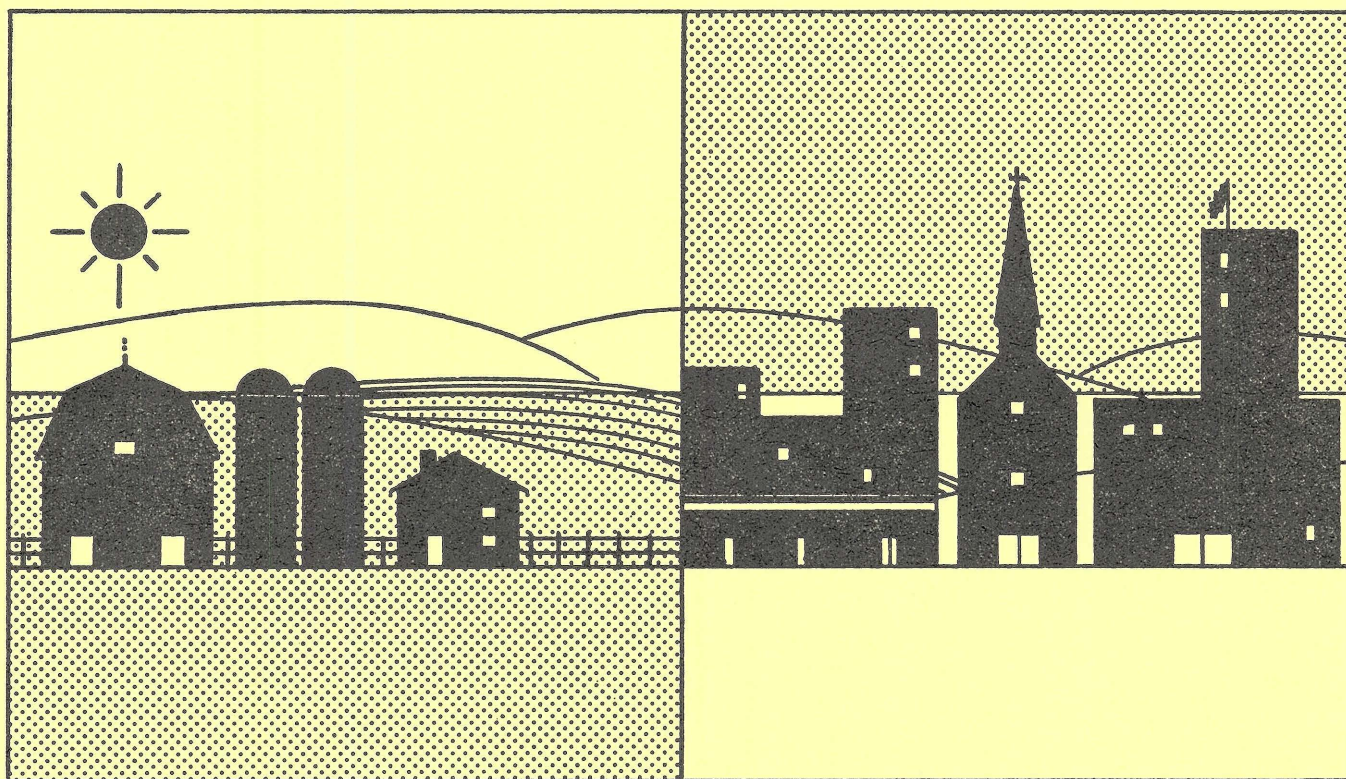


# Rural-Urban Differences: Myth or Reality?

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# RURAL-URBAN DIFFERENCES: MYTH OR REALITY?

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## INTRODUCTION

The major purpose of this bulletin is to discuss the relationship of place of residence to selected attitudinal and socio-economic characteristics. A theoretical model of *social scale* is presented and subjected to empirical test, using attitudinal data collected from rural and urban residents in several Ohio communities. Socio-economic data relative to fertility, income, education, and age were derived from the 1970 census to evaluate convergence of differences on an aggregate basis.

Major emphasis is given to structural-functional theory, especially the concept of interdependency, to explain why convergence of differences should occur on a macro-level basis.<sup>1</sup> Reliance was placed on differential rates of change as the mechanism of explaining why rural-urban differences should remain identifiable among specific community groups.

## LITERATURE REVIEW

### Evolution of the Rural-Urban Debate

A controversy has existed for many years regarding the existence of rural-urban differences in attitudes and behavioral patterns. Many sociologists have argued that rural-urban differences exist and are important in the explanation of human behavior, while others have articulated the position that no significant differences remain. The controversy probably had its impetus in the early use of the rural-urban ideal types for typological purposes. Tonnies (37) in the late 1800's developed ideal-type constructs which conceptualized what he considered to be characteristics of the *Gemeinschaft* and *Gesellschaft*<sup>2</sup> systems. These ideal-type constructs became the polar extremes of the rural-urban continuum.

Once the community ideal types were formulated, researchers began to use them for classification purposes, such as Loomis' (19) classic work on the nature of rural social systems. When the ideal-type constructs became widely used for typological purposes, the debate started concerning the validity of the rural-urban continuum and has proceeded to the present. Concomitant with validity of the continuum question arose the debate concerning the existence of rural-urban differences.

<sup>1</sup>Macro-level refers to the total aggregated rural and urban populations, while micro-level refers to specific communities within the aggregated populations.

<sup>2</sup>Implicit within the *Gesellschaft*-like systems are many of the characteristics of high-scale systems. Movement toward *Gesellschaft*-like systems suggests increasing scale of the society, since complex forms of social organization appear to be highly correlated with the characteristics associated with the concept "*Gesellschaft*."

One of the most significant criticisms of the rural-urban continuum was presented by Richard Dewey in 1960. He argued that characteristics commonly attributed to the polar extremes of the rural-urban continuum were not solely the possession of either. Characteristics of the *Gemeinschaft*-like systems are often present in the *Gesellschaft*-like systems and vice versa. Dewey concluded by saying that rural-urban differences may exist and have significant sociological implications, but the rural-urban continuum probably poses some problems for research.

### The Problem of Defining Rural

One of the problems of evaluating the existence of rural-urban differences is an agreed-upon definition of *rural*. Wirth (41) observed that *rurality* is characterized by low density population, homogeneous social groupings, integrated roles, traditional orientation, and informal social organization. Implicit within Wirth's argument is the contention that *urban* connotes the opposite of each of these characteristics.

Critics of Wirth's conceptual scheme are numerous. Stewart (35) noted that density of population may or may not reflect rurality or urbanity. Individuals living in communities of 2,500 or less, the commonly used population definition of rural, may possess characteristics which are quite urban-like, while people living in large urban communities may exhibit behavior which is often associated with rural residence. Stewart attributed part of the explanation for the intermingling of rural-urban behavioral patterns to rapid transportation systems. Transportation and technological advances have negated the necessity for residential proximity to occupation, which leads to dispersed urban populations. The result of population dispersion is that rural residence no longer is closely associated with agricultural occupations. Such a situation could easily create a rural community by population definition, but in reality the rural community may be nothing more than the extension of the urban community into the rural fringe areas.

Stewart's explanation for the erosion of rural-urban differences supports the scalar model, since he uses increasing complexity of technology and transportation as explanatory factors. He suggests that as technology improved, rapid transportation systems expanded and tended to have a leveling effect upon the differences among spatial groups. As the scale of rural increased, the differences began to decline.

Others have attempted to elaborate upon the meaning of rurality. Willits and Bealer (39) showed

that *rurality* is difficult to define by using such variables as occupation, place of residence, population density, traditionalism, distance to metropolis, proportion of farmers, and area traditionalism. They concluded that an area of 2,500 or less could be quite urban oriented and a community of more than 2,500 could be very rural oriented, depending upon the variables used for evaluation.

Duncan (6) provided further insight into the problem of the definition of rural when he observed that clear distinctions cannot be made between rural and urban communities from continuum studies. He noted that many variations in human behavior can be observed in supposedly comparable communities, using such variables as size and social complexity as indicators.

The dilemma of rural-urban differences was further complicated when Schnore (30) entered the debate. Schnore said that while rural-urban differences are decreasing over time, the remaining differences are *crucial* in explaining human behavior. He contended that the often criticized variable of occupation is useful in determining rurality or urbanity, but other factors should be considered before conclusive delineation is made of communities into specific typological categories. Schnore further stated that there are social differences between rural and urban areas in terms of fertility rates, occupational status, and educational achievement which result in behavioral differences.

Gladden and Christiansen (12), on the other hand, reported that rural mining groups did not differ significantly from urban groups on values. This study revealed that rural people in eastern Kentucky mining communities were similar to urban groups in terms of basic value structure.

#### **Other Rural-Urban Studies**

Straus (36) analyzed rural-urban differences in regard to kinship interaction and his findings revealed that low-income farm women have a higher incidence of kinship interaction than urban middle-class women. The study also revealed an inverse relationship between kinship interaction and achievement values, educational expectations, and homemaking creativeness for low-income farm women. While one may conclude that these differences are the product of rural-urban residence, it is possible that the differences may be the result of socio-economic status differences.

Reiss' (28) research adds support to the position that social class variables may be more significant than place of residence in the explanation of behavioral differences. He discovered that no significant rural-urban differences exist in terms of time spent in intimate association with family, friends, and interpersonal relationships outside the home when socio-economic sta-

tus is controlled. Reiss did note significant differences, however, between rural and urban people in terms of the number of impersonal contacts during the average workday. Urban males tend to have more impersonal contacts during the workday than rural farm dwellers, while rural farm people devote more time to work activities than the rural nonfarm or urban group.

Key (17) offered further evidence of the apparent lack of rural-urban differences in family interaction when he reported that no straight line relationship exists between urbanity and familism. Both rural and urban people possess a familistic orientation in terms of frequent visitation.

Hathaway, Monachesi, and Young (15) discovered that rural-urban differences were apparent in terms of personality characteristics. Rural-reared children exhibited a tendency to be more shy, more suspicious, more fearful, and more self-deprecating than urban children. The urban child demonstrated a higher degree of rebellion to authority and was less self-critical than the rural group.

Middleton and Grigg (22) also observed rural-urban differences in terms of personality characteristics. Urban males tended to have higher aspirations than rural males, even though both groups aspired to white-collar occupations. Less obvious was the finding that black rural dwellers did not significantly differ in aspiration levels from their urban counterparts.

Munson (23) added additional support to the position that differences exist between rural and urban people in terms of personality characteristics of rural, town, suburban, and urban children. Their research indicated that suburban children were superior to the other groups in terms of personal and social adjustment. Urban children were better adjusted personally and socially than rural and village children.

Other aspects of family relationships have been analyzed in terms of the rural-urban variable. Bultena (4) noted that family interaction patterns of the aged were not significantly different between rural and urban. It was revealed, however, that urban children visited their aged parents more frequently than rural children. The researcher suggests that this difference was not necessarily due to a lack of interest in visiting aged parents, but was probably due to the spatial distance in the rural areas. Bultena concluded that the commonly held position that extended family disintegration is a product of structural changes resulting from urban growth may be false, since rural groups have experienced the same phenomenon. What Bultena did not say was that rural areas may be more urban-like (higher scale) in terms of social organization than in the past. This could partially explain the erosion of the extended family unit in rural communities.

Evidence of greater family stability in rural areas can be noted from divorce rates of rural and urban populations. Lillywhite (18) found that rural dwellers less frequently seek divorce than urbanites.

Life styles of the aged, however, have been shown to be somewhat different between rural and urban groups (Goldstein, 13). Research has shown that the rural farm aged experienced less reduction in their incomes upon retirement than their urban counterpart. These findings strongly suggest that the rural aged have a better opportunity to maintain a life style to which they have become accustomed.

Beers (2) contributed another dimension to the controversy of rural-urban differences when he analyzed the attitudes of rural and urban people toward labor unions, farm price supports, appropriations for slum clearance, government control of prices, guaranteed incomes, government regulation of business, international relations, and education. The findings revealed that rural farm populations tended to fit the classical mold of conservative, rural-agrarian value structure, while the urban group was much more liberal on most issues. The farm group was much more conservative on personal and societal issues, but less so in terms of international questions.

The conclusion to be drawn from this discussion is that consensus among social scientists has not been achieved on the issue of rural-urban differences. Behavioral patterns which were at one time thought to be clearly identifiable with place of residence (rural or urban) are not so easily applied today. In essence, both rural and urban populations have become high scale. For example, the economic organization of rural farm operations is quite similar to urban industrial forms, while urban studies indicate that city dwellers maintain close primary type interaction with family and friends. Each of these examples is contrary to the expectations one would have if it was assessed that urban groups were high scale and rural areas low scale.

In this context, the hypothesis to be tested was that rural-urban differences are still identifiable, but the differences are only a matter of degree rather than basic differences. It is further hypothesized that differences are being eroded on an aggregate (macro-level) basis, but significant differences remain between specific (micro-level) spatial groups.

#### **Causal Factors Associated with the Disintegration of Rural-Urban Differences**

Various theoretical positions have been offered to explain the apparent erosion of rural-urban differences within large, complex social systems. A particularly promising theoretical position is the *scalar model* initially developed by Wilson (40) and elabo-

rated upon by Greer (14) and Simpkins (32). The central construct of this model is *scale*, which refers to a social system characterized by a high level of technological expertise and extensive use of sophisticated mechanical equipment for production. A high scale social system is also characterized by mass communication and transportation systems which enhance the potential for interdependency of component subgroups of the society. Other factors associated with high scale are extensive use of non-animal energy sources, elaborate systems of social organization, mutual dependency of societal members, and elaborate systems of social control.

#### **Historical Development of Rural-Urban Differences**

While the contemporary American society is undoubtedly high scale, the social situation in the past cannot be so easily defined as such. When the society was primarily an agriculturally based social system with little mass communication and few transportation systems, it is evident that by contemporary criteria the society would have been defined as low scale. Agricultural production was dominated by animal energy use and technology was comparatively simple. With the advent of rapid industrial expansion and the evolution of large urban communities, the socio-economic situation began to change. Industrial forms of economic organization were elaborated in the urban communities with the concomitant development of complex forms of social organization. Rural areas of the society, however, remained characterized by small family-farm operations in an economic environment approaching pure competition which required less complex forms of social organization and less elaborate systems of interaction. These differing forms of social and economic organization which were developed during the early period of American social history contributed to the formation of rural-urban differences. The two segments (rural and urban) differed in degrees of scale.

While the American social system was elaborating itself in size and social complexity, other forces were in operation; specifically, technological innovation tended to hasten the erosion of previously distinguishable social differences. Technological advances necessitated the elaboration of complex social and economic subsystems to accommodate the implementation of the innovations which facilitated interdependency of the components of the society. With the advent of systemic interdependency came the erosion of rural-urban differences.

#### **The Leveling Effect of Interdependency**

Greer (14) noted that as a social system becomes more complex (increases in scale), the components of the social system become more interdependent. The

interdependency is facilitated by rapid communication flow and increased social control by large organizations, which add impetus to further increases in scale; each process supports and elaborates the other. As a social system continues to mature, in terms of ever-increasing scale, forces in operation tend to destroy radical differences among its component parts. Communication channels, rapid transportation facilities, and increasing technology tend to destroy physical and social isolation which are major factors blocking the diffusion and adoption of new ideas and techniques. Channels for cultural exchange open for all components of the system which tend to provide the mechanisms for the erosion of differences.

The increasing interdependency of the components of a social system has particular significance for smaller subunits of the system. Greer (14) noted that as interdependency of systemic components increases, the lower scale subsystems tend to lose local autonomy. Local communities (components of the total system) are exposed to conflicting norms from other sectors of the system which could contribute to the fragmentation of the local order. Such a situation could result in the assimilation and acculturation of the smaller-scale subsystem into the larger units to the extent that local community groups eventually cannot be easily distinguished from other segments of the society.

Mutual dependency among the various components of a social system is partially a function of the exchange of goods and services, which implies that social and economic viability of one component is partially dependent upon the others. Interdependency necessitates coordinated activity for the benefit of all systemic numbers. To achieve the coordination of activities, the various communities must consider the implications of individual action upon the other component parts. This suggests that local activity may become subordinate to the viability of the total system. In essence, small rural community groups may be required to delegate many decision-making responsibilities to the other segments of the system. Thus a portion of local autonomy is lost.

To achieve the integration of the system, a central control unit is often necessary to coordinate systemic functions. The coordination function is most often delegated to cities due to high population concentrations, political power, and industrial and scientific expertise located within the urban communities. Galle (11) and Pappenfort (26) investigated the functions of urban communities in relation to other community groups and showed that cities dominate large geographical areas and become interdependent with other communities.

The same principle applies to local behavioral patterns, since cultural changes may be necessary to accommodate new practices and ideas which will bring about increased systemic viability (using the criteria of high scale as the means of determining viability). Adoption of common practices, ideas, and normative structure enhances the integration of the various component subsystems.

Since the urban groups assume the dominant integrating roles, the subsystem's members are often required to modify their behavioral patterns or practices and become quite similar to the dominant sectors of the system. In essence, the behavior exhibited within rural communities becomes much like that in the larger cities, which means that rural communities are becoming or are already high scale.

### **The Increasing Scale of Rural Areas**

Evidence of the rural movement toward large scale<sup>3</sup> may be noted in the work of such writers as Nelson (24), Spaulding (33), and Fuguitt (10). The basic contention of these and other writers is that the rural segment of the United States is becoming much like its urban counterpart. Nelson (24) noted that the economic organization of rural and urban areas is becoming less differentiated over time due to the mechanization of farm operations and the integration of rural people into the economic environment of the large scale social system. Modern farmers utilize business practices similar to industrial and other non-agricultural business groups. They have adopted sophisticated mechanized farm machinery to the extent that contemporary farming operations exhibit many of the characteristics of nonfarm business enterprises. What has happened in terms of technology is also true for behavior.

Both Nelson (24) and Fuguitt (10) noted that technology and urban behavioral patterns have been diffused to rural areas to the extent that rural life in many respects cannot be distinguished from urban living. Emphasis is most often placed upon the contributions of urbanites to the rural sector, but rural migrants also have diffused rural behavioral patterns to urban groups. This suggests that cultural exchange should result in a leveling effect among rural and urban groups.

If this form of logic is followed to its conclusion, it is highly probable that he would conclude that rural-urban differences will at some point in time be completely eliminated. Such logic, however, contains a major flaw that change will occur in anticipated ways and eventually at the same rate. To achieve similarity among component parts, the lower scale subsystems must be increasing in terms of scale

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<sup>3</sup>Large scale is used interchangeably with high scale.

at a more rapid rate than the higher scale subsystems. For the subsystems to remain similar, once comparability is established, the subsystems must change at the same rate. This is highly improbable since the inertia of change should continue at differential rates for the various subsystems. Some components of a particular subsystem may change more rapidly than others. The once lower scale subsystem may maintain the inertia of change at such a rate that the previously smaller scale subsystem (community) may become higher scale than other subsystems. The basic argument is that differential change could easily negate the assertion that rural-urban differences will be eventually eliminated.

One could question the legitimacy of a model which purports to explain the erosion of rural-urban differences while arguing that differences should remain identifiable, but the apparent discrepancies in such a model can be explained. The scalar model employing the concept *interdependency* has utility in demonstrating why convergence of rural-urban differences should occur on an aggregate basis. However, the differential change component of the theory should be useful in explaining the dissimilarities between specific systemic components. The basic contention of this theory is that interdependency of communities has undoubtedly eliminated many differences between the rural and the urban groups on an aggregate basis, but that significant differences still remain identifiable with spatial groups and are important in the explanation of human behavior. It is argued that there is considerable variance between various rural communities and extensive variance among urban communities.

### **A TEST OF RURAL-URBAN ATTITUDINAL DIFFERENCES**

A research study was designed to evaluate whether or not rural-urban groups differed in terms of selected attitudes and socio-economic status. Data were also collected from secondary sources to determine whether or not convergence of rural and urban differences was occurring on a macro-level basis.

The independent variable used in the research was place of residence (rural and urban): Rural was defined as communities of 2,500 or less. The dependent variables were community identification, community satisfaction, physical mobility, education commitment, familism, socio-economic status, value orientation, and alienation from the local community. The dependent variables were selected primarily in terms of the literature review of studies completed in the research area of rural-urban similarities and differences.

### **Operationalization of the Variables**

Community identification was defined in terms of group cohesion among community members. Community identification was said to be operative if the individual perceived other members of his community group to be a reflection of himself to some extent. The basic components of community identification were group cohesion (a feeling of belonging), sharing of successes and failures, and sentiment of liking. It should be noted that the identity group may or may not be the total community population. A person could be identified with one subgroup of the community and not the others.

Community satisfaction was conceptualized in terms of basic gratification with existing services and shopping facilities within the local community.

Physical mobility was characterized in terms of the willingness of the individual to voluntarily relocate away from the area. An individual willing to relocate intra-community was not considered physically mobile. The variable is an attitudinal measure and not necessarily reflective of actual physical movement. A person may wish to remain in a specific community but be required by circumstances to relocate. The variables, however, should provide some insight into the effectiveness of the community in meeting the individual's perceived needs. Unless exogenous variables were operating, it was reasoned that one's favorable attitude toward maintenance of residence within the community would be a significant factor in determining whether or not a community member would remain in the community or would relocate elsewhere.

Commitment to education was defined in terms of commitment to formal education and occupational aspiration.

Familism was denoted as the commitment to nuclear and extended family units, even if such commitment necessitated sacrifice of nonfamily interaction. The basic components of this variable were intensity and frequency of family interaction as opposed to nonfamily relationships. An individual who was highly committed to family interaction was considered to possess a familistic orientation.

Socio-economic status was defined as the relative ranking of the individual within the existing stratification system of the society. Components of this variable were occupational status, educational achievement, and income level.

Value orientation was conceptualized in terms of the commitment to rapid change within the community. The two concepts used to formulate the construct were traditionalism and modernism. A traditionalist was defined as one who is less willing to accept rapid community change since he prefers social

stability to change. The modernist is one who desires change within the community even if the definitions of the past must be subjected to modification.

Alienation was defined as a feeling of powerlessness to control one's future and self-estrangement from a social situation perceived by the individual as unable to suffice one's needs. A person was considered to be alienated if he believed the community to be unable to gratify his needs, believed that he had little influence in the decision-making process of the community, and was self-estranged from the community as a group.

#### **Hypotheses Formation for a Micro-Level Test of the Scalar Theoretical Model**

Using the above variables which were selected on the basis of the literature review, hypotheses were constructed in the context of the differential change component of the theory. If the differential change portion of the theory is correct, there should be significant differences among specific communities (micro-level). The hypotheses for testing are presented below in null hypothesis form:

1. There is no significant difference between rural and urban populations in terms of socio-economic status.
2. There is no significant difference between rural and urban populations in terms of commitment to formal education.
3. There is no significant difference between rural and urban groups in terms of value orientation.
4. There is no significant difference between rural and urban groups in terms of community identification.
5. There is no significant difference between rural and urban groups in terms of community satisfaction with services.
6. There is no significant difference between rural and urban populations in terms of physical mobility.
7. There is no significant difference between rural and urban population in terms of familism.
8. There is no significant difference between rural and urban populations in terms of community alienation.

#### **METHODOLOGY**

To test the differential change portion of the theory which posited that rural-urban differences on a micro-level basis would be identifiable, a sample of 313 people was drawn from urban and rural areas on a systematic random sample basis (4). One-hundred

seventy people were selected from three rural communities, while 143 individuals were chosen from an urban community in central Ohio. The data were collected during 1969 and 1970. The primary data collected from these individuals provided the basis for evaluating attitudinal differences between rural and urban groups.

The rural communities were purposely selected on the basis of low population and non-industrial economic base, while the urban center was selected on the basis of industrial economic base and relative high population. The rural communities had no population concentration within a recognized political boundary of more than 2,500, while the urban community in 1970 had a population base of approximately 670,000 within the sampled area (1971 census). The rural community residents were dispersed and the urban population was concentrated. The rural communities had experienced stable or declining population, while the urban community had experienced population growth over the last decade.

#### **SAMPLING TECHNIQUE**

The sampling technique for the rural communities consisted of the selection of every fourth house, with the initially selected residence chosen at random.<sup>4</sup> The interviewers were instructed to enter each community from a different direction and to begin the selection procedure from diverse points during the interviewing period. All outlying sections in the rural communities were included in the sample, since the interviewers were cautioned not to cluster the sample. Detailed county maps showing every occupied residence in the county were used to validate the random distribution of the sample. Every selected house was specified to note its conclusion in the sample. Inspection of the county maps upon completion of the data collection revealed that the sample was widely distributed throughout the sample areas.

The urban sampling technique consisted of the selection of every tenth house, with the initially selected residence chosen at random. The interviewers were instructed to enter specified sectors of the city from different points. The urban community was subdivided into approximately 30 subareas and the systematic random sample was selected from each subarea. Inspection of the city map upon completion of the data collection revealed that the sample was widely distributed. The characteristics of the samples are presented in Table 1.

<sup>4</sup>A portion of one rural community was purposely sampled since it had been affected by forced relocation of population. However, analysis of the data revealed that the relocated subgroup did not significantly differ from the sampled nonrelocated portion of the community group.



TABLE 1.—Summary Statistics for Selected Communities: Characteristics of Sample.

	X Years		Ownership		Occupation		Income (\$1,000)		Employment	
	Age	Length of Residence	Own	Rent	Blue Collar				Work in Community	Work out of Community
Rural Community A	43.4	15.4	80%	20%	68%	Less than 3 3- 5 5-7.5	3 ( 3%) (13%) (20%)	7.5-10 10-15 More than 15	49%	51%
Rural Community B	54.8	22.8	87%	13%	78%	Less than 3 3- 5 5-7.5	3 (27%) (20%) (23%)	7.5-10 10-15 More than 15	61%	39%
Rural Community C	44.5	19.3	74%	26%	65%	Less than 3 3- 5 5-7.5	3 (16%) (11%) (26%)	7.5-10 10-15 More than 15	52%	48%
Urban Community	42.3	14.3	82%	18%	43%	Less than 3 3- 5 5-7.5	3 (12%) ( 7%) (11%)	7.5-10 10-15 More than 15	100%	

## INSTRUMENT CONSTRUCTION

A structured questionnaire was formulated using Likert-type scales (7) to measure the selected attitudinal variables. There were five possible responses to each item: strongly agree, agree, undecided, disagree, and strongly disagree. The Rundquist-Sletto (8) technique for arbitrary weighting was used to determine item values. The item values were summed to provide a scale score for each individual, and the individual scale scores were grouped into urban and rural categories for analysis purposes. Analysis of variance was used to determine whether or not the urban and rural groups differed on the selected attitudinal variables.

The scales were pre-tested, using students from rural communities enrolled at The Ohio State University as the pre-test subject group. The data from the pre-test group were analyzed by internal consistency item analysis (5) and modified for use in the study. The revised scales were administered to the subject community groups and again analyzed by internal consistency item analysis. The reliability scores for the attitudinal scales are in Table 2.

The relatively high Spearman-Brown coefficients indicate that the scales are reliable measurement devices. Construct validity was employed as the validation technique for the various scales. Several previously constructed scales<sup>5</sup> were consulted in the formation of the instruments used for this research, enhancing the confidence placed in the validity of the measurement instruments.

The final schedule consisted of 79 Likert-type items. Warner's Index of Status Characteristics (16) was modified and added to provide a measure of socio-economic status. The attitudinal scales are in Appendix I and the technique for determining socio-economic status is in Appendix II.

<sup>5</sup>Andrews and Eshleman, 1963; Davis, 1954; Flinn, 1966; Rico-Velasco, 1969; Phillips, 1966; Nettler, 1967; Meier and Bell, 1959; Srole, 1956.

TABLE 2.—Spearman-Brown Prophecy Coefficient for Selected Attitudinal Scales.

Scale	Spearman-Brown Prophecy Coefficient
Commitment to Formal Education	.6920
Value Orientation	.8203
Community Identification*	.8464
Community Satisfaction	.7934
Physical Mobility	.8579
Familism	.7153
Community Alienation*	.9100

\*To ensure independence of measures, both scales were analyzed together and the item loadings indicated that the two scales were not measuring the same phenomenon and constituted independent measures.

The data from the rural groups were aggregated to form the rural portion of the research. The rural and urban data were subjected to one-way analysis of variance to determine if there were significant differences between the groups.

## PRESENTATION AND DISCUSSION OF ATTITUDINAL FINDINGS

The findings of the research verified the existence of rural-urban attitudinal differences. The analysis of variance findings indicated that the rural and urban groups were significantly different on socio-economic status, commitment to formal education, value orientation, community satisfaction, and physical mobility. There were no significant differences

between the rural and urban groups in terms of community identification, familism, and community alienation. Summaries of the analysis of variance findings are in Tables 3 and 4.

## EVALUATION OF HYPOTHESES

I. Socio-economic status was significantly higher for the urban group. The mean scores for both groups place each within the lower-middle class range, but the urban group was on the extreme upper end of the class level while the rural group was on the lower end. The null hypothesis for socio-economic status must be rejected.

II. The urban group exhibited a significantly higher degree of commitment to formal education

TABLE 3.—Relationships of Selected Dependent Variables and Area of Residence.

Dependent Variables	Rural	Urban	Significance Level of Differences
Socio-Economic Status	Lower Middle Class (Lower than Urban)	Lower Middle Class (Higher than Rural)	Significant Differences at .001 Level
Commitment to Formal Education	Highly Committed (Less than Urban)	Highly Committed (More than Rural)	Significant Differences at .001 Level
Value Orientation	Modernistic (More than Urban)	Modernistic (Less than Rural)	Significant Differences at .001 Level
Community Identification	Highly Identified (More than Urban)	Highly Identified (Less than Rural)	No Significant Differences at .05 Level
Community Satisfaction	Marginally Satisfied	Highly Satisfied	Significant Differences at .001 Level
Physical Mobility	Immobile	Marginally Immobile	Significant Differences at .001 Level
Familism	Highly Familistic (Slightly Less than Urban)	Highly Familistic (Slightly Higher than Rural)	No Significant Differences at .05 Level
Community Alienation	Low Level of Alienation (Slightly Higher than Urban)	Low Level of Alienation (Slightly Lower than Rural)	No Significant Differences at .05 Level

TABLE 4.—Summary Statistics for Analysis of Variance Between Rural and Urban Groups.

Dependent Variable	Rural Group	Urban Group	Range of Possible Scores	F-Ratio and Degree of Freedom
Socio-Economic Status	$\bar{X} = 10.3$ SD = 2.4	$\bar{X} = 8.8$ SD = 3.5	18 Max. <sup>a</sup> 3 Min.	F = 18.9*** d.f. = 1 and 276
Commitment to Formal Education	$\bar{X} = 17.4$ SD = 4.3	$\bar{X} = 15.7$ SD = 4.6	40 Max. <sup>b</sup> 8 Min.	F = 12.0*** d.f. = 1 and 311
Value Orientation	$\bar{X} = 20.9$ SD = 4.7	$\bar{X} = 22.7$ SD = 4.4	40 Max. <sup>c</sup> 8 Min.	F = 12.9*** d.f. = 1 and 311
Community Identification	$\bar{X} = 52.7$ SD = 6.1	$\bar{X} = 51.6$ SD = 7.2	70 Max. <sup>d</sup> 14 Min.	F = 2.1* d.f. = 1 and 311
Community Satisfaction	$\bar{X} = 19.2$ SD = 4.3	$\bar{X} = 25.4$ SD = 3.8	30 Max. <sup>e</sup> 6 Min.	F = 180.0*** d.f. = 1 and 311
Physical Mobility	$\bar{X} = 31.0$ SD = 6.0	$\bar{X} = 28.1$ SD = 7.0	45 Max. <sup>f</sup> 9 Min.	F = 15.2*** d.f. = 1 and 311
Familism	$\bar{X} = 48.4$ SD = 5.8	$\bar{X} = 49.7$ SD = 6.9	65 Max. <sup>g</sup> 13 Min.	F = 2.8* d.f. = 1 and 311
Community Alienation	$\bar{X} = 48.1$ SD = 9.5	$\bar{X} = 46.3$ SD = 11.1	105 Max. <sup>h</sup> 21 Min.	F = 2.5* d.f. = 1 and 311

<sup>a</sup>High scores indicate low status.

<sup>b</sup>High scores indicate low commitment.

<sup>c</sup>High scores denote traditionalism.

<sup>d</sup>High scores indicate high community identification.

<sup>e</sup>High scores indicate high community satisfaction.

<sup>f</sup>High scores indicate high physical immobility.

<sup>g</sup>High scores indicate high commitment to family.

<sup>h</sup>High scores denote high alienation.

\*Not significant at .05 level.

\*\*Significant at .01 level.

\*\*\*Significant at .001 level.

than the rural group. However, both groups were highly committed. The null hypothesis relative to commitment to education must be rejected.

III. The group mean score for value orientation revealed that both groups were much more modernistic than traditionalistic. The rural group was significantly more modernistic than the urban, contrary to the stated direction of the hypothesis. The null hypothesis must be rejected.

IV. There was no significant difference between the groups in terms of community identification. The null hypothesis relative to community identification was accepted. Both groups were basically identified with their respective communities, since the mean scale scores revealed that both groups had positive attitudes on this variable.

V. The urban group was significantly more satisfied with community services than the rural group. The rural people, however, were not basically dissatisfied with the services and facilities available to them. The null hypothesis relative to community satisfaction must be rejected. The mean community satisfaction scores for both groups were greater than the median possible scale score, suggesting that both groups held positive attitudes toward the services offered.

VI. Physical mobility was significantly greater for the urban group than the rural group. However, both groups indicated that residential stability was desirable. The null hypothesis relative to this variable must be rejected. The mean scale scores for physical immobility revealed that both groups desired residential stability.

VII. Both groups possessed a familistic orientation. No significant differences existed between the two groups on this variable. The null hypothesis for familism must be accepted.

VIII. There were no significant differences between rural and urban groups in terms of community alienation. Neither group could be considered alienated, but the urban group exhibited slightly less alienation than the rural group. The null hypothesis relative to community alienation must be accepted.

## DISCUSSION OF ATTITUDINAL FINDINGS

The research findings revealed significant differences between rural and urban groups, but the differences were of degree rather than basically polarized positions. The findings demonstrated that attitudinal differences were identifiable with place of residence. Socio-economic status was different as well. Both the rural and the urban groups possessed familistic orientation, were identified with their community group, and were not alienated from their respective communities.

Both groups held a modernistic attitude about community change, both valued education highly, and both were rather heterogeneous on socio-economic status. The sample standard deviations revealed more homogeneity in the rural group, but both groups had several classes represented.

The findings suggest that Dewey and Duncan (6) were correct when they observed that similar characteristics could be noted in rural and urban groups. The relative lack of polarized attitudes by the rural and urban groups can be explained in terms of the diffusion process and interdependency of component parts of the system. In essence, both rural and urban areas are now high scale. This suggests that increasing scale of the society has blurred the distinctions between rural and urban groups. The direction and rapidity of the acculturation of attitudes are beyond the scope of this cross-sectional study. Longitudinal research should be conducted concerning this particular aspect of rural-urban studies.

An interesting discovery was the apparent reluctance of urban people to disassociate themselves from several primary-like attitudes even though they were living in a large, complex social system. The apparent desire to maintain primary-like attitudes in social situations which have many characteristics of *Gesellschaft* (high scale) cannot be attributed to recent immigration of rural people to the urban community. The mean length of residence of the urban sample was approximately 14 years, which means that the urban people were long-term residents.

An example of the *Gemeinschaft*-like attitudes held by the urban group is familism. Perhaps, urban people maintain close familial ties because the family is one of the few remaining primary groups in which the individual interacts.<sup>6</sup> If this is true, then one could conclude that the nuclear family will probably increase in importance in urban areas and remain significantly important for rural people as the rural system moves toward larger scale social organization.

The familism findings are supportive of Reiss' (28) research which demonstrated that rural and urban people did not differ in terms of time spent in intimate interaction. The data tend to refute the commonly held position that urbanites are less familistically oriented than rural people, since both the rural and the urban groups were highly committed to family relationships.

Both rural and urban groups were not alienated from their respective communities, both groups were at least marginally satisfied with the services provided within their respective areas, and both groups were

<sup>6</sup>Interaction within this context is defined as intense and frequent contact. Interaction is used to connote intimacy of interaction.

identified with their community group. These findings suggest that the attraction of rural living is not necessarily in terms of perceived effectiveness of the community in providing services nor in the type of interpersonal interaction occurring within a rural social setting. Perhaps the attractiveness of rural communities is the slower tempo of living and the increased freedom to achieve self-actualization in rural oriented subsystems.

Maslow (20) defined self-actualization as a state of being where the individual fulfills his needs in such a manner as to bring satisfaction to himself and not necessarily directed toward others. Self-actualization is a feeling of enjoyment and personal satisfaction in various aspects of living. While the opportunity may be available in urban communities for the achievement of self-actualization, perhaps greater opportunity for achievement of this state is provided in rural areas. This is an area of research which should be investigated further.

An important finding in Table 4 was that both the rural and the urban groups were strongly committed to education. It is apparent that formal education and job training were perceived quite favorably by both groups, even though urbanites possessed a significantly higher commitment. The urban group tended to express a more favorable attitude toward formal education, which may be reflective of a more applied educational orientation of the rural population. However, it should be emphasized that the rural group held high positive attitudes toward educational achievement.

Evaluation of data concerning physical mobility indicated that the rural people were significantly less physically mobile than the urban group, but that the urban group also possessed a positive attitude toward residential stability. Perhaps the relatively frequent relocation of residence by urban people is a function of occupational job transfer rather than the desire to relocate elsewhere. The data suggest that urban dwellers in the sample were well integrated within the urban community and were basically satisfied with the shopping and service facilities. The urban group also exhibited high community identification, adding further support to the contention that basic dissatisfaction with urban living was not a significant motivating factor in physical relocation.

Part of the explanation of the physical immobility of rural farm dwellers can be attributed to the commitment to their farms. It is much more difficult to move a farm operation than household goods. The farmer must acquire new land and move his personal possessions, livestock, and machinery, which are difficult tasks.

The value orientation findings demonstrated that the rural people in the study were willing to accept rapid social change. The data refuted the commonly held position that rural people will resist extensive and continual community change and maintain the status quo. Although both groups possess positive attitudes toward community change, the findings suggest that rural people are somewhat more amenable to change than urban people. The implication for rural development agencies is that rural people are willing to consider change and probably will initiate change within their community if the change can be shown to be beneficial to the group.

### **A TEST OF THE CONVERGENCE OF RURAL-URBAN DIFFERENCES**

Due to the nature of the research design used to evaluate rural-urban attitudinal differences, little can be stated regarding the convergence of rural-urban attitudinal differences. However, it should be noted that the scalar theory posited earlier strongly supports the position that differences should be converging on a macro-level basis. To test this theoretical position, data were collected from the 1950, 1960, and 1970 censuses<sup>7</sup> to evaluate the validity of the theoretical model.

Data were collected from census publications for Ohio to determine whether or not convergence of rural-urban differences was occurring on selected variables. Schnore's research which demonstrated differences in terms of fertility, educational achievement, and occupational status was used as a basis for selection of three variables to test the convergence of differences. Educational achievement in terms of median years of school completed for adults 25 years of age and older for the 1950-1970 period was used to test whether or not convergence was occurring in regard to median school years completed. The fertility ratios for the rural and urban population were also compared for the 1950-1970 period. Since occupational status should be highly correlated with income, median family income was utilized for test of the convergence model, using data from 1950 through 1970 for comparative purposes. The fourth variable included the median age of the population to test convergence and the 1950-1970 period was again used for analysis purposes.

If the theoretical model which was articulated earlier is correct regarding the role of systemic interdependency in the leveling of rural-urban differences, then definite trends toward convergence should be

<sup>7</sup>No attempt was made to correct the data for any changing definitions of rural or urban. The data were entered as presented in the various census publications. It is possible that some contamination of the findings could result from definitional changes.



**TABLE 5.—Rural-Urban Educational Achievements for Ohioans 25 Years of Age and Older, 1950-1970.**

	Median School Years Completed			1950-1960 Percent Change	1960-1970 Percent Change
	1950*	1960*	1970†		
Rural	9.0	10.4	12.0	15.6 %	15.4 %
Urban	10.2	11.0	12.1	7.8 %	10.0 %
State	9.9	10.9	12.1	10.1 %	11.0 %

\*Source: U. S. Census of Population 1960. Ohio General Social and Economic Characteristics, PC(1) 37C Ohio, U. S. Dept. of Commerce. U. S. Govt. Printing Office, Washington, D.C., 1962, p. 37-230.

†Source: Calculated from data presented in Table 51, U. S. Census of Population 1970, General Social and Economic Characteristics: Ohio, U. S. Dept. of Commerce. U. S. Govt. Printing Office, Washington, D.C., 1972, pp. 37-334, 37-335.

**TABLE 6.—Rural-Urban Median Family Income for Ohio, 1950-1970.**

	Median Income			1950-1960 Percent Change	1960-1970 Percent Change
	1950*	1960*	1970†		
Rural	\$2,813	\$5,456	\$ 9,564	94.0 %	95.3 %
Urban	\$3,629	\$6,442	\$10,573	77.5 %	64.1 %
State	\$3,412	\$6,171	\$10,313	80.9 %	67.1 %

\*Source: U. S. Census of Population 1960. Ohio General Social and Economic Characteristics, PC(1) 37C Ohio, U. S. Dept. of Commerce. U. S. Govt. Printing Office, Washington, D.C., 1962, p. 37-247.

†Source: Calculated from data presented in Table 57, U. S. Census of Population 1970, General Social and Economic Characteristics: Ohio, U. S. Dept. of Commerce. U. S. Govt. Printing Office, Washington, D.C., 1972, pp. 37-346, 37-347.

identifiable from longitudinal data. The four variables mentioned above were subjected to critical analysis for the expressed purpose of demonstrating convergence on a macro-level.

#### **Convergence of Rural-Urban Differences for Median School Years Completed**

Data from Table 5 clearly indicate that educational achievement differences between rural<sup>8</sup> and urban populations in Ohio are being eroded over time. The median years of school completed by the adult rural population has been increasing at a much more rapid rate than for the urban population. If the trend continues as it has in the past 20 years, little difference should exist in the future in terms of median school years completed for the 25 years of age and older segments of rural and urban populations in Ohio. The education findings support the position that convergence of differences is occurring.

Table 5 reveals that median school years completed for the adult rural population increased about 16% between 1950-1960 and approximately 15% between 1960-1970. The urban increases were about 8% and 10% during the same time periods. It is highly probable that the magnitude of the increases for the aggregated rural and the urban groups will become quite similar in the next decade, since the differences in the achievement levels are not very great.

<sup>8</sup>Data for the rural non-farm and rural farm were aggregated to form the rural group. Rural hereafter is used in this context.

#### **Convergence of Rural-Urban Differences for Median Family Income**

The findings of the income variable for rural and urban segments of Ohio are in Table 6. The findings again demonstrate that convergence has been taking place during the last 20 years on the income variable.

Table 6 reveals that between 1950 and 1960, median family income for the rural residents of Ohio increased by 94% and rose by approximately 95% during 1960-1970. The corresponding increases in urban areas were about 78% during 1950-1960 and about 64% during 1960-1970. These findings suggest that median income differentials are not nearly as great as they once were.

#### **Convergence of Rural-Urban Differences for Fertility**

Data collected for the fertility ratio of the rural and urban segments of Ohio's population are in Table

**TABLE 7.—Fertility Ratio\* for Rural-Urban Areas of Ohio, 1950-1970.**

	1950†	1960‡	1970**
Rural	490	539	375
Urban	386	491	351
State	416	503	367

\*The fertility ratio is the number of children 5 years and under per 1,000 women between the ages of 15-49.

†Source: Calculated from data presented in U. S. Census of Population 1950, General Population Characteristics, Ohio, Table 15, pp. 35-37.

‡Source: U. S. Census of Population 1960, General Population Characteristics: Ohio, Table 13, pp. 37-47.

\*\*Source: U. S. Census of Population 1970, General Population Characteristics, Ohio, Table 16, pp. 37-75.

7. The data show that convergence of rural-urban differences is taking place in terms of the fertility ratio.<sup>9</sup> The difference between the rural and urban fertility ratios in 1950 was 104 (490—386=104), while the difference was only 24 (375—351=24) in 1970. The pattern was consistently converging for the 20-year period, indicating a definite trend toward convergence of the difference on this variable as well. While there were higher fertility ratios for 1960 than either 1950 or 1970, it should be noted that the trend toward convergence was still maintained.

#### Convergence of Rural-Urban Differences for Median Age

Data relative to median age were collected from the census for rural and urban segments of Ohio and compared for the 20-year period of 1950-1970. The findings revealed that convergence was occurring on this variable. Inspection of the median age of the rural and urban population in Table 8 shows that the difference between the two groups (rural and urban) for 1950 was 2.8 years, but only 0.8 years in 1970. The major portion of the reduction of the difference occurred between 1960-1970. These findings support the position that convergence is also occurring on this variable.

#### EVALUATION OF THE SCALAR THEORETICAL APPROACH TO RURAL-URBAN STUDY

The findings tended to support most aspects of the theoretical model presented. Longitudinal research findings clearly demonstrated that convergence was occurring on a macro-level basis on selected variables, which is consistent with the scalar model. The differential change position which posited that rural-urban differences should be identifiable on a micro-level basis was basically supported by the attitudinal findings of the research.

While the differential change model and the interdependency concept appear to be incompatible, both theoretical positions when simultaneously applied to the study of rural-urban differences appear to have considerable utility. The interdependency component proved to be useful in providing an explanation of apparent convergence of rural-urban differences on a macro-level basis. Rural and urban areas of Ohio are becoming quite similar on the selected variables. From the macro-level perspective, the processes of change implicit within the increasing scale model as elaborated by Greer (14) and others were extremely useful in the explanation of the leveling of differences on an aggregate basis.

<sup>9</sup>Fertility ratio is calculated by the standardized formula:  

$$\frac{\text{number of children 5 years old and younger}}{\text{number of women 16 to 49}} \times 1000 = \text{fertility ratio}$$

**TABLE 8.—Median Age of Rural-Urban Population in Ohio, 1950-1970.**

	1950*	1960*	1970†
Rural	29.2	27.3	27.1
Urban	32.0	30.1	27.9
State	31.2	29.5	27.7

\*Source: U. S. Census of Population 1960, General Population Characteristics, Ohio, Table 16, pp. 37-55.

†Source: U. S. Census of Population 1970, General Population Characteristics, Ohio, Table 20, pp. 37-84.

On the other hand, considerable variance should occur between different communities (subsystems) as posited by the differential change component of the theory. If one assumes that subsystems are changing at differing rates to achieve the leveling of significant differences, then some aspect of the subsystems should remain different from others. This was validated in terms of the attitudinal variables and the socio-economic status variable.

The attempt to use two theoretical models simultaneously to analyze rural-urban differences revealed that basically two different conclusions could be deduced from the findings by using each of the theoretical perspectives separately. The conclusion drawn from longitudinal data used to test the scalar model would have been that convergence was occurring. The conclusion which would have followed from the attitudinal and socio-economic status analysis would have been that differences were identifiable with place of residence.

The apparent discrepancies of the two positions conceivably could be partially attributable to the differential methodology used. Utilization of cross-sectional design to test the attitudinal findings and longitudinal design to test the convergence model could lead to some difficulty, since the attitudinal differences may be converging as well. However, it is highly probable that while differences are converging, considerable variance within rural and urban groups is still present. The argument is that aggregation of the variances to form the total rural and urban groups would hide considerable variance within aggregated groups. Within this explanatory framework, convergence of differences could occur on the macro-level while significant differences could be present on the micro-level.<sup>10</sup>

<sup>10</sup>Since only four variables were analyzed on a longitudinal basis, it is readily admitted that some significant deviations from the pattern perhaps could have been noted if other variables had been included in the analysis. More extensive analysis should be conducted before the convergence principle is absolutely accepted. Variables which may be useful to analyze would be: participation in formal and informal organizations, voting behavior, mass media utilization, and role structure within rural and urban groups.

The two-theory approach for rural-urban study would appear to have considerable merit in preventing vertical theory formation without regard for other potentially fruitful models and increase the validity of the conclusions drawn from the findings. The researcher must reconcile any apparent discrepancies such as revealed in this research attempt. The findings of this research suggest that the controversy associated with rural-urban differences may be the level of convergence of differences, rather than inconsistencies in research findings. The convergence of rural-urban differences could easily occur on a regional, state, or national basis (macro-level), while specific rural groups could differ. It is also conceivable from this particular perspective that rural and urban groups could be quite similar as well. It is also highly probable from this position to argue that some rural groups could be significantly different from other rural groups and that urban communities could differ as well.

The basic conclusion from this sequence of logic is that generalizations concerning the convergence and possible eradication of rural-urban differences on an aggregate basis appear valid. Extreme caution should be exercised in terms of saying that such generalizations are applicable in micro-level situations. The tremendous variations among community groups in Ohio should suffice to show that significant differences are recognizable. A rural farming community primarily dominated by marginal farm operations in one sector will probably differ significantly from a rural community group of wealthy farmers located on the fringe of a large metropolitan area. A small urban community in a rural farming area may differ significantly from a large industrial-based metropolitan community.

The implication of this research is that planners must be cautious of aggregate data since many variations may be hidden within the data. Implicit within this type of argument is the need for primary data collection for program implementation within community groups.

### SUMMARY AND CONCLUSIONS

Schnore's (30) position that rural-urban differences do exist and have significance in the explanation of behavior appears to have been partially supported in terms of the attitudinal variables examined in this study. The findings suggest that, in terms of specific attitudes, place of residence remains a significant factor in the explanation of differences among the groups studied.

The longitudinal findings gleaned from the census data support the position that rural-urban differences are being eroded by time. The implications of these findings are that it is highly probable that exist-

ing differences will continue to be eliminated on an aggregate basis. The scalar model which posits that subsystems should become less differentiated over time was strongly supported by the longitudinal data.

Place of residence appears to remain a factor in the explanation of attitudinal differences on a micro-level basis, but is of less utility in explaining differences in other social phenomena on a macro-level basis. It is not the intention of this author to argue that place of residence is a cause of the attitudinal differences, but rather to suggest that area of residence (rural or urban) still appears to have utility in differentiating groups on selected social phenomena. It is also not the intention to suggest that the findings of this research effort are new discoveries in the discipline, but rather are an attempt to empirically validate several contemporary positions on the subject of rural-urban studies. The findings suggest that rural-urban differences on a micro-level basis are quite real in terms of specific attitudes, but that in the relative near future, many differences between rural and urban groups on a macro-level basis may become myths.

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## APPENDIX I

### Familism Scale

1. I would rather visit with friends than with my relatives.
2. I take pride in the success of a close relative.
3. My personal business is of no concern to my relatives.
4. Most of the time I do not want to be bothered by my relatives.
5. A person should live close to his relatives if possible.
6. Writing letters to family members is important to me.
7. Home is the most pleasant place in the world.
8. Family relationships have been stressed too much.
9. The family group is becoming less important to me over time.
10. A person should seldom visit his family.
11. What happens to my relatives is of little concern to me.
12. A good family life is necessary to be happy.
13. A person should be willing to sacrifice nearly anything for his family.

### Commitment to Formal Education

1. Education is really not worth the effort.
2. Education beyond high school is a necessity for success.
3. Getting an education is the best way to get ahead in this world.
4. People should not be so concerned about improving themselves.
5. I would not be willing to take special training even if I could get a better job.
6. My children's occupation will probably be better than mine (or my husband's).
7. My children will have a better chance in life than I have had.
8. Education is not as important as most people think it is.

### Physical Mobility Scale

1. I do not ever wish to leave my present home.
2. I would find it difficult to feel at home in another community.
3. I would move if I could afford it.
4. When I move, I will move to another place in this community.
5. I do not want to leave this area.
6. I would like to move from this community.
7. I would enjoy moving to another state.
8. I would not move very far even if I could get a better job.
9. I would not want to move more than 25 miles from this community.

### Value Orientation Scale

1. Most of the changes in this community have come too slowly.
2. What this community needs is more change.
3. Most old-fashioned ideas hold back progress.
4. Most people must give up the old ways of the past if this community is to progress.
5. Change is coming too fast in this community.
6. This community is changing too fast for me.
7. Most modern ways of doing things bring progress to the community.
8. Community progress is more important than living by the ways of the past.

### Community Identification Scale

1. I know most people in this community quite well.
2. The people in this community are like one big happy family.
3. I trust most people in this community.
4. I am concerned about what happens to this community.
5. Most people in this community are friendly to my family.
6. No one can agree upon anything in this community.
7. When someone in the community is sick, I will stop what I am doing to help him.
8. I feel that I have never been a part of this community.
9. Many people in this community are unfriendly.
10. I take pride in the success of a neighbor.
11. When a neighbor needs help in a job, I am happy to lend him a hand.
12. I often share tools with my neighbors.
13. I do not feel that I am wanted in this community.
14. When someone leaves this neighborhood, nearly everyone feels a loss.

### Community Satisfaction Scale

1. Most people are not able to buy the things they need in the stores in this community.
2. We often have to go to surrounding towns to get the things we need.
3. The services of this community basically satisfy my needs.
4. Basically, the services in this community are very poor.
5. Most people have to do without many services in this community.
6. I can get most of the things I need in this community or in the stores nearby.

### Community Alienation Scale

1. Most leaders in this community are capable men.

2. I would associate with most people in this community.
3. I definitely like this community.
4. This community fulfills most of my needs.
5. Most of the leaders of this community are concerned about me.
6. Most of the people in this community cannot be trusted.
7. I feel fairly well adjusted to this community.
8. I feel fairly well satisfied with this community.
9. I am not important as a person in this community.
10. I would prefer to live in another community.
11. Most elected officials cannot be trusted.
12. I do not believe this community will prosper.
13. Most of the leaders of the community understand the problems of the people.
14. This community is a good place to live.
15. I am proud to be a member of this community.
16. The community does not provide for my needs very well.
17. Few of my neighbors are concerned about me as a person.
18. Few people in this community care what happens to the other members of the community.
19. I do not feel at home in this community.
20. Most people in this community work to make the community a better place in which to live.
21. Most of the leaders of this community respond to the needs of the community members.

## APPENDIX II

### SOCIO-ECONOMIC INDEX TO DETERMINE CLASS POSITION

#### Weighting Values for Income.

Income Level	Weighted Value
\$15,000 and more	1
\$10,000—\$15,000	2
\$ 7,500—\$10,000	3
\$ 5,000—\$ 7,500	4
\$ 3,000—\$ 5,000	5
\$ 3,000 or less	6

#### Weighting Values for Education.

Educational Level	Weighted Value
Post Graduate Studies (17 Years and Above)	1
Four Years of College (16 Years)	2
High School Graduate (12 Years)	3
8-11 Years of School	4
5- 7 Years of School	5
1- 4 Years of School	6

#### Weighting Values for Occupation.

Occupational Level	Weighted Value
Professional (proprietors of large industry; requires master's degree or better)	1
Semi-professional (lesser officials of large industry; requires bachelor's degree)	2
Owners and proprietors of small businesses and farms (highly skilled white collar)	3
Skilled laborers and foremen (secretaries, lesser white collar personnel)	4
Semi-skilled laborers and clerical staff	5
Unskilled laborers	6

#### Class Groupings on Socio-Economic Status.

Class	Score on Socio-Economic Scale
Upper	3- 4
Upper Middle	5- 8
Lower Middle	9-11
Upper Lower	12-14
Lower Lower	15-18

Class position was determined by summing the weighted values for income, education, and occupation. For example, a person would receive a score of 3 and be classified in the upper class if he had the following characteristics: income of \$15,000 or more, post graduate education, and was classified as a professional in terms of occupation.

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# *The State Is the Campus for Agricultural Research and Development*



Ohio's major soil types and climatic conditions are represented at the Research Center's 13 locations. Thus, Center scientists can make field tests under conditions similar to those encountered by Ohio farmers.

Research is conducted by 15 departments on more than 6500 acres at Center headquarters in Wooster, nine branches, Green Springs Crops Research Unit, Pomerene Forest Laboratory, and The Ohio State University.

Center Headquarters, Wooster, Wayne County: 1953 acres

Eastern Ohio Resource Development Center, Caldwell, Noble County: 2053 acres

Green Springs Crops Research Unit, Green Springs, Sandusky County: 26 acres

Jackson Branch, Jackson, Jackson County: 344 acres

Mahoning County Farm, Canfield: 275 acres

Muck Crops Branch, Willard, Huron County: 15 acres

North Central Branch, Vickery, Erie County: 335 acres

Northwestern Branch, Hoytville, Wood County: 247 acres

Pomerene Forest, Laboratory, Keene Township, Coshocton County: 227 acres

Southeastern Branch, Carpenter, Meigs County: 330 acres

Southern Branch, Ripley, Brown County: 275 acres

Western Branch, South Charleston, Clark County: 428 acres